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**OBJECTIVES:** Over two-thirds of the US population are overweight or obese. While current pharmacotherapy options for weight loss are limited, new weight loss products have not been approved partly over safety concerns, including some linked to weight-related illnesses such as hypertension. However, very little is known about the association of available weight-loss pharmacotherapy with changes in drug therapy for weight-related illnesses. **METHODS:** A retrospective cohort analysis of a deidentified pharmacy claims database evaluated adult patients initiating weight-loss pharmacotherapy (no weight-loss drug prescriptions 6 months prior) between November 1, 2007 – October 31, 2010. Patients with continuous eligibility for 6 months pre- (baseline) and 6 months post- weight-loss drug initiation were evaluated for changes in concomitant drug therapy associated with weight-related illnesses (hypertension, dyslipidemia, type 2 diabetes, anxiety, gastrointestinal disorders, depression, and hypothyroidism). Six-month outcomes included concomitant therapy incidence, and net change (% patients adding  $\geq 1$  drug minus % discontinuing  $\geq 1$  drug in each illness category) analyzed using t-test (significance at  $p < 0.05$ ). **RESULTS:** A total of 91,160 patients initiated weight-loss pharmacotherapy: phentermine ( $N=67,434$ ), sibutramine ( $N=13,438$ ), orlistat ( $N=8,047$ ), phendimetrazine ( $N=4,631$ ), and diethylpropion ( $N=4,350$ ); mean  $\pm$  SD age  $44 \pm 12$  years (96%, 18-64 y/o), 82% female. Patients received  $1.5 \pm 0.8$  concomitant weight-related illness drugs at baseline for hypertension (21.6%) depression (14.9%), dyslipidemia (11.5%), hypothyroidism (9.2%), gastrointestinal disorders (9.6%), anxiety (6.7%), and diabetes (5.5%). Incident/net therapy change over 6 months for each illness category: hypertension (3.2%/-6.5%), depression (0/-16.0%), dyslipidemia (1.1%/-12.2%), hypothyroidism (1.2%/+0.7%), gastrointestinal disorders (0.2%/-17.1%), anxiety (1.1%/-19.4%), and diabetes (0.6%/-8.9%). All net changes from baseline are significant ( $p < 0.05$ ), with the exception of hypothyroidism therapy. **CONCLUSIONS:** Concomitant therapy for obesity-related illnesses generally has a low incidence and declines significantly over 6 months after initiating weight-loss pharmacotherapy. Antihypertensive and hypothyroidism therapy appear to follow different patterns, and whether this reflects disease progression, effect of weight-loss therapy, genetics, or other factors warrants further investigation.

#### PSY54

##### A COST ESTIMATION OF THE NEW GUIDELINE TO TREAT BLEEDING EPISODES IN PATIENTS WITH HAEMOPHILIA AND INHIBITORS IN IRAN

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**OBJECTIVES:** Haemophilia is one of the rare diseases in Iran; the government legally has to cover its costs completely. Total drug subsidies are 320 millions USD and 30% of subsidies have been allocated for the blood coagulating factors. There are 3900 and 1100 registered patients with haemophilia A and B respectively which 190 of them are haemophilia with inhibitors. 17% of total drug subsidies have been allocated for two bypassing agents; recombinant Factor VIIa and activated prothrombin complex concentrate. The ministry of health has proposed a new guideline for managing costs of haemophilia with inhibitors so this study tries to estimate cost of bypassing agents in this protocol and compares it with the current situation. **METHODS:** For estimating the costs of new protocol, the price of medicines and the patients' information and statistics were taken from the Ministry of Health and National Haemophilia Foundation. Information about responding to different treatments and effectiveness of these two medicines were extracted from evidence based literatures and systematic reviews. **RESULTS:** Based on new protocol the average cost for each bleeding episode is 1960 USD; it means 9 million USD for 190 patients annually. A sensitivity analysis shows it can vary from 4 to 14 million USD. The current expenditure for these two bypassing agent is more than 45 million USD annually. **CONCLUSIONS:** The study shows the cost of new protocol for 190 patients with inhibitors is 9 million USD annually; it could be 14 million USD in the worst situation. This is 25 percent of current cost that has been paid for these two bypassing agents. This notable gap may occur because of some reasons such as smuggling to neighbors, off label uses, irrational drug use, inefficient patient management and moral hazards. The absence of efficient guideline not only causes wasting limited resources but also increases risky behaviors.

#### PSY55

##### COST OF AUTOLOGOUS AND ALLOGENEIC STEM CELL TRANSPLANTATIONS FOR HAEMATOLOGICAL DISEASE: A DUTCH MULTICENTRE DAILY PRACTICE STUDY

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**OBJECTIVES:** Peripheral blood stem cell transplantations (PBSCT) are very expensive life-saving medical procedures carried out in patients with haematological disease. The current tariffs are expected to be too low due to developments in treatment protocols. A revision of the tariffs is urgently necessary. We calculated the cost of PBSCT for treating haematological diseases in Dutch daily practice, to provide a proper basis for revising hospital budgets. **METHODS:** From three Dutch university hospitals, we randomly selected 191 patients who underwent an autologous (auto) or allogeneic (allo) PBSCT in 2008 or 2009. The alloPBSCT were subcategorized into sibling, matched unrelated donor (MUD) and unrelated cord blood (UCB). We obtained data from hospital registrations to study all treatment related

activities. Unit prices were based both on real costs and tariffs (base year 2010). Thereafter, the average costs per patient per PBSCT and per period were calculated. The total cost included the selection and harvesting, transplantation and 1-year follow-up. **RESULTS:** The average cost per patient of autoPBSCT were € 45,670. The cost of sibling alloPBSCT were € 101,919. The average cost of transplantations from an unrelated donor were much higher: € 171,478 for MUD and € 254,689 for UCB alloPBSCT. Hospital days, laboratory procedures and donor search were the largest cost components and mainly responsible for differences between the four types of PBSCT. None of the patient characteristics were correlated with average cost. The costs calculated in this study are above current reimbursement. The difference is significant ( $p=0.043$ ) and depending on the type of PBSCT, the shortfall varied between 2% and 100%. **CONCLUSIONS:** Average cost of AutoSCT and alloSCT laid above current reimbursement levels. Appropriate financing is necessary to guarantee the continuation of PBSCT in Dutch patients according to current indications. The costs calculated in this study provide reliable input for economic evaluations.

#### Systemic Disorders/Conditions – Research on Methods

#### PSY56

##### EFFECT OF WORKSITE WEIGHT MANAGEMENT PROGRAM ON WORKERS PRODUCTIVITY

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**OBJECTIVES:** Obesity has reached epidemic proportions and has many cost implications, including increases in medical spending and productivity losses in the workplace. Many studies have found a correlation between workers obesity and absenteeism (days missed from work) and presenteeism (losses in on the job productivity). Our study examines the impact of a worksite weight management program on workforce productivity. **METHODS:** The Work Limitations Questionnaire (WLQ) was administered to study participants ( $N=379$ ) at beginning and end of 2-year trial. Employees were asked about their productivity during the previous 2 weeks of work and to rate any impairment they had in the areas of time, physical, mental-interpersonal and output demands on a five-point scale. The resulting WLQ productivity loss score was converted to a percent of time lost. Using a t-test, we compared mean productivity and BMI changes over 2 years between the study groups. **RESULTS:** The intervention arm had a mean BMI of 27.85 and 27.93 at baseline and follow-up, respectively, vs. 28.22 and 28.46 in the control arm. The average percent lost productivity for the intervention group was no different from that in the control group (2.20% vs. 2.37%,  $p > 0.05$ ). At the two year follow-up, the intervention group saw an increase in lost productivity at 2.44% and the control group saw a decrease at 2.11%. **CONCLUSIONS:** Our results suggest that having a weight management program does not necessarily improve productivity of the workforce. Future studies should further examine the relationship between obesity, weight loss and productivity as well as methods to increase productivity of the working population.

#### PSY57

##### WAIST CIRCUMFERENCE AND BODY MASS INDEX RECORDING – A THIN DATABASE STUDY

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**OBJECTIVES:** Waist circumference (WC) is considered an indicator of cardiovascular and metabolic risk therefore it is important to assess electronic WC recording in general practice. This study evaluated the level of WC recording in UK primary care and its association with body mass index (BMI). **METHODS:** WC recording in The Health Improvement Network (THIN) between 2007 and 2010 was assessed. Patients with and without WC records were counted by practice, year and BMI category (underweight  $<18.5\text{kg/m}^2$ , normal  $\geq 18.5$ - $<25\text{kg/m}^2$ , overweight  $\geq 25$ - $<30\text{kg/m}^2$ , obese  $\geq 30\text{kg/m}^2$ , no BMI record). Patients were registered at the practice for the entire year. Only WC and BMI records during the year of interest were included. **RESULTS:** From 2007-2010 there were 59,193 patients (1.4%) with a WC record. WC recording increased over time from 0.9% of patients in 2007 to 1.6% in 2010. However, there were still 69 practices (15.7%) with no WC records during 2010. Overall, patients with a WC record had a mean age of 60.9 years (standard deviation (SD): 17.4), mean WC of 90.4cm (SD:15.0) and 53.2% were male. Patients without a WC record had a mean age of 49.5 years (SD:21.5) and 49.5% were male. 2.1% and 78.2% of patients with and without a WC record respectively did not have a BMI record. Of patients with BMI and WC, 0.7% were underweight, 20.9% normal, 36.4% overweight and 42.0% obese, whereas patients without WC were categorised as 2.8%, 32.7%, 33.2% and 31.3% respectively. **CONCLUSIONS:** Despite the WC recording percentage being low, nearly sixty thousand patients had a WC record and recording increased over time. Research would therefore benefit from investigating later years. GPs seemed more likely to record WC for patients with high BMI, therefore research using WC should investigate any potential bias this may introduce. Future studies could investigate associations between WC recording and other factors.

#### PSY58

##### RESPONSIVENESS OF THE TREATMENT SATISFACTION WITH MEDICINES QUESTIONNAIRE (SATMED-Q) IN A LONGITUDINAL SAMPLE OF PATIENTS WITH NEUROPATHIC PAIN

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**OBJECTIVES:** The Treatment Satisfaction with Medicines (SATMED-Q) questionnaire has shown appropriate psychometric properties exploring patient's satisfac-